THAT WHICH IS CLAIMED:

1. A cutting torch capable of restricting flashback, comprising:

a head including an interior surface extending around and defining a head cavity, an oxygen port that is open to the head cavity and is for receiving oxygen from an oxygen supply and supplying oxygen to the head cavity, and a fuel port that is open to the head cavity and is for receiving fuel from a fuel supply and supplying fuel to the head cavity;

an adapter having a body mounted to the head, wherein the adapter is mounted to the head by engaging threads of the body to threads of head and rotating the head relative to the body through a plurality of revolutions in a first direction, whereby the body can be unmounted from the head by causing relative rotation between the head and the body through a plurality of revolutions in a second direction which is opposite from the first direction, wherein the adapter defines at least one fuel passageway that is in communication with the fuel port for receiving fuel from the fuel port, the adapter further includes a porous structure that is a distinct component from the body and has a multiplicity of convolute passageways extending therethrough, the porous structure is carried by the body so that the porous structure rotates with the body through the respective plurality of revolutions while the body is being mounted to and unmounted from the head, and the porous structure is positioned in the fuel passageway to restrict flashback from entering the fuel port of the head, and wherein the body has an internal surface that extends around an axis to define an axially extending bore that is open at opposite ends of the body; and

a cutting tip mounted to the head via the adapter and extending through the bore of the body, for discharging the fuel and gas from the cutting torch.

2. A cutting torch according to claim 1, wherein the porous structure is annular and thereby defines a bore extending therethrough that is substantially wider than any of the convolute passageways, and wherein the cutting tip extends through the bore of the porous structure so that the porous structure extends around the cutting tip.

3. A cutting torch according to claim 1, wherein the internal surface of the body includes an annular seat extending around the axis, and the cutting tip includes an outer annular seat engaged to the annular seat of the body to substantially close at least a portion of the head cavity.

4. A cutting torch according to claim 1, wherein the porous structure is mounted to the body at least partly by virtue of the porous structure being press-fit to the body.

5. A cutting torch according to claim 1, wherein a portion of the fuel passageway is defined between the interior surface of the head and an exterior surface of the adapter.

6. A cutting torch according to claim 1, wherein the cutting tip includes at least one oxygen passageway that is in communication with the oxygen port for receiving oxygen from the oxygen port, and the oxygen passageway and the fuel passageway are isolated from one another.

7. A cutting torch according to claim 1, wherein the adapter includes a radial port having an axis that extends radially with respect to the axis of the body, and the radial port is in communication with the convolute passageways of the porous structure.

8. A cutting torch according to claim 7, wherein a channel is adjacent and at least partially encircles the porous structure for communicating between the radial port and convolute passageways of the porous structure.

9. A cutting torch according to claim 1, wherein the porous structure is mounted to the body at least partly by virtue of at least one fastening device that secures the porous structure to the body.

10. A cutting torch according to claim 9, wherein the fastening device includes a shaft that extends into both the porous structure and the body.

11. A cutting torch according to claim 1, wherein the porous structure is positioned in the bore of the body.

12. A cutting torch according to claim 11, wherein the internal surface of the body includes an annular shoulder extending around the axis, and the porous structure abuts the shoulder and an annular portion of the internal surface of the body that is adjacent the shoulder.

13. A cutting torch according to claim 12, wherein a circumferential surface of the porous structure is press-fit to the annular portion of the internal surface of the body that is adjacent the shoulder.

14. A cutting torch according to claim 13, wherein the cutting tip extends through a bore of the porous structure so that the porous structure extends around the cutting tip.

15. A cutting torch capable of restricting flashback, comprising:

a head including an interior surface extending around and defining a head cavity, an oxygen port that is open to the head cavity and is for receiving oxygen from an oxygen supply and supplying oxygen to the head cavity, and a fuel port that is open to the head cavity and is for receiving fuel from a fuel supply and supplying fuel to the head cavity;

an adapter defining at least one fuel passageway, and including a porous structure that is carried by a body, wherein the porous structure is a distinct component from the body, has a multiplicity of convolute passageways extending therethrough, and is positioned in the fuel passageway, and wherein the body has an internal surface that extends around an axis to define an axially extending bore that is open at opposite ends of the body;

means for mounting the body to the head and unmounting the body from the head, so that:

the porous structure remains with the body while the body is being mounted to and unmounted from the head, and

while the body is mounted to the head the fuel passageway is in communication with the fuel port for receiving fuel from the fuel port, and the porous structure, which is positioned in the fuel passageway, is operative for restricting flashback from entering the fuel port of the head; and

a cutting tip mounted to the head via the adapter and extending through the bore of the body, for discharging the fuel and gas from the cutting torch.

16. An adapter for being mounted to a head of a cutting torch for cooperating with a cutting tip and restricting flashback, the adapter comprising:

a body having threads for mounting the body to the head or for mounting the cutting tip to the body, and an axis about which the threads helically spiral, wherein the body includes an internal surface that extends around the axis to define an axially extending bore that is open at opposite ends of the body and that is for having the cutting tip extend therethrough; and

a flashback-restricting porous structure fitted to the body for being mounted to the head with the body, and for remaining with the body when the body is unmounted from the head, wherein the porous structure is a distinct component from the body and has a multiplicity of convolute passageways extending therethrough, and the porous structure is annular and thereby defines a bore extending therethrough that is substantially larger than any of the convolute passageways, and wherein the bore is for having the cutting tip extend therethrough.

17. An adapter according to claim 16, wherein the surface of the porous structure that defines the bore is for being in opposing face-to-face relation with the cutting tip while the cutting tip extends through the bore.

18. An adapter according to claim 16, wherein an internal surface of the adapter includes an annular seating surface that ends around the axis and is for engaging the cutting tip, and the seating surface extends obliquely with respect to the axis.

19. An adapter according to claim 16, wherein the threads are external threads for mounting the adapter internally to the head, and the body further includes internal threads for mounting the cutting tip to the adapter.

20. An adapter according to claim 16, wherein the porous structure is mounted to the body at least partly by the porous structure being press-fit to the body.

21. An adapter according to claim 16, wherein the porous structure is mounted to the body at least partly by a fastening device that secures the porous structure to the body.

22. An adapter according to claim 21, wherein the fastening device includes a shaft that extends into both the porous structure and the body.

23. An adapter according to claim 16, wherein adapter includes a port having an axis that extends radially with respect to the axis of the body, and the port is in communication with the convolute passageways of the porous structure.

24. An adapter according to claim 23, wherein adapter includes a channel that is adjacent and at least partially encircles the porous structure and is for communicating between the port and convolute passageways of the porous structure.

25. An adapter according to claim 16, in combination with the cutting tip, wherein the cutting tip is mounted to the adapter and extends through the bore of the body and the bore of the porous structure.

26. A combination according to claim 25, wherein the internal surface of the body includes an annular seat extending around the axis, and the cutting tip includes an outer annular seat engaged to the annular seat of the body.

27. A combination according to claim 25, wherein the internal surface of the body includes an annular shoulder extending around the axis, and the porous structure abuts the shoulder and is press-fit to an annular portion of the internal surface of the body that is adjacent the shoulder.

28. A combination according to claim 27, wherein the body includes a bore that extends radially through the body and through the annular portion of the internal surface of the body that is adjacent the shoulder.

29. An adapter for being mounted to a head of a cutting torch for cooperating with a cutting tip and restricting flashback, the adapter comprising:

a body having an internal surface that extends around an axis of the body to define an axially extending bore that is open at opposite ends of the body and that is for having the cutting tip extend therethrough, wherein the internal surface of the adapter includes an annular seat for engaging the cutting tip, and the seat extends around the axis and obliquely with respect to the axis; and

a flashback-restricting porous structure fitted to the body for being mounted to the head with the body and for remaining with the body when the body is unmounted from the head, wherein the porous structure is a distinct component from the body and has a multiplicity of convolute passageways extending therethrough, and the porous structure is annular and thereby defines an bore extending therethrough that is substantially larger than any of the convolute passageways, and wherein the bore is for having the cutting tip extend therethrough.

30. An adapter according to claim 29, wherein adapter includes a port having an axis that extends radially with respect to the axis of the body, wherein the port is in communication with the convolute passageways of the porous structure.

31. An adapter according to claim 30, wherein adapter includes a channel that is adjacent and at least partially encircles the porous structure and is for communicating between the port and convolute passageways of the porous structure.

32. An adapter according to claim 29, wherein the body includes external threads for mounting the adapter internally to the head and internal threads for mounting the cutting tip to the adapter.

33. An adapter according to claim 29, wherein the porous structure is mounted to the body at least partly by the porous structure being press-fit to the body.

34. An adapter according to claim 29, wherein the porous structure is mounted to the body at least partly by a fastening device that secures the porous structure to the body.

35. An adapter according to claim 29, in combination with the cutting tip, wherein the cutting tip is mounted to the adapter and extends through the bore of the body and through the bore of the porous structure, and the cutting tip includes an outer seat engaged to the seat of the body.

36. A combination according to claim 35, wherein the internal surface of the body includes an annular shoulder extending around the axis, and the porous structure abuts the shoulder and is press-fit to an annular portion of the internal surface of the body that is adjacent the shoulder.

37. A combination according to claim 36, wherein the body includes a bore that extends radially through the body and through the annular portion of the internal surface of the body that is adjacent the shoulder.